

Title (en)  
PROCESS AND APPARATUS FOR REGENERATING SULFURIC ACID

Publication  
**EP 0022181 A3 19810826 (DE)**

Application  
**EP 80103187 A 19800609**

Priority  
• CH 551379 A 19790613  
• DE 3018665 A 19800516

Abstract (en)  
[origin: EP0022181A2] 1. Process for regenerating contaminated sulphuric acid using indirect heating in apparatuses coated with enamel, characterized in that the acid is first concentrated to an output concentration of between 60 and 80 % by weight of H<sub>2</sub> SO<sub>4</sub> in an indirectly heated single-stage or, optionally, even multistage preconcentration unit, the acid is subsequently introduced into a high concentration unit where it is concentrated to a level of 90 % by weight to 98.3 % by weight of H<sub>2</sub> SO<sub>4</sub> at temperatures of between 160°C and 250°C and under a pressure of between 4 and 13.3 x 10<sup>3</sup> Pa and then the acid is delivered to a purification stage in which a temperature of between 220°C and 350°C is maintained, and the acid is purified under atmospheric pressure or reduced pressure, the enamel layer still having a residual compressive stress of at least 10 % under all working conditions.

IPC 1-7  
**C01B 17/88**

IPC 8 full level  
**B01D 1/00** (2006.01); **B01D 1/02** (2006.01); **B01D 1/26** (2006.01); **B01D 1/30** (2006.01); **C01B 17/88** (2006.01); **C01B 17/90** (2006.01)

CPC (source: EP)  
**B01D 1/0094** (2013.01); **B01D 1/02** (2013.01); **B01D 1/26** (2013.01); **B01D 1/30** (2013.01); **C01B 17/88** (2013.01); **C01B 17/905** (2013.01)

Citation (search report)  
• FR 1241856 A 19600923 - KESTNER APP EVAPORATEURS  
• DE 1074019 B  
• DE 2242055 A1 19740307 - IND CHEMIE THOMA GMBH

Cited by  
CH682398A5; EP0566949A1; EP0666240A1; EP0429933A1; DE19642328A1; EP0476744A1; AU631753B2; EP0293710A3; EP0155586A1; EP0425000A1; DE3935892A1; DE4230099A1; DE4230099C2; EP0293710A2; WO0068141A1; WO2008003297A3

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DOCDB simple family (application)  
**EP 80103187 A 19800609**; CA 353787 A 19800611; ES 492361 A 19800612; FI 801880 A 19800611